



The City of Raleigh

Stormwater Management Advisory Commission

August 2, 2018
3:00 pm

Conference Room 305
Raleigh Municipal Building

Commission Members Present: Matthew Starr, Vanessa Fleischmann, Jonathan Page, Francine Durso, Ken Carper, David Webb, Evan Kane, Chris Bostic and Mark Senior

Staff Members Present: Blair Hinkle, Kelly Daniel, Scott Smith, Suzette Mitchell, Kristin Freeman, Justin Harcum, Veronica Barrett, Allison McGarity, Ashley Rodgers, Julia Litchford, Ben Brown, Kevin Boyer, Veronica High, Dale Hyatt, and Scott Bryant

Commission Members Absent: Trey Cash

Guests: Nancy Weayng, Brett Wells, Jon Becker, Cameron Long, Patrick Cavi, Marsha Presnette, and Suerly Joh

Meeting called to order: at 3:00 pm by Matthew Starr

1. Welcome, Introductions, Excused and Unexcused Absence and Approval of the Minutes

- **Mr. Senior** made a motion to excuse Trey Cash from today's meeting, and **Mr. Page** seconded. The motion was approved unanimously.
- The July 19th meeting minutes will be presented to the Commission for approval at September's meeting.

2. Stormwater Staff Report

- **Raleigh Rainwater Rewards Projects** (2 staff approved projects) – One of the projects was two small raingardens on a single property, and the other project was a cistern.
- **Staffing Update** –
 - **New** - Julia Litchford (*Engineer*) for Development Plan Reviews
 - **Promotion** –
 - Business Services - Neil Harrison (*Engineering Support Supervisor*)
 - Business Services - Allison McGarity (*Engineering Specialist*)
 - Stormwater Control Measures (SCM) – Jonathan McNeil (*Senior Engineering Specialist*)
- **United States Geological Survey Stream Gauge Status** – USGS has installed two gages so far (Buck Jones and Trailwood) and tomorrow they will install a level gage at Lake Johnson Dam.

3. Drainage Assistance Project Reviews (Dale Hyatt)

Dale Hyatt brought forth to the Commission four Drainage Assistance projects for review. He informed the Commission of the FY19 funding of \$1,500,000. The overall presentation consists of: Pending Projects Portfolio, Project Location Maps, the Four Projects for Review, and the Funding Summary.

- **5703, 5701 & 5700 Edgedale Drive Bank Stabilization:** A tributary to Mine Creek runs through the back yards of 5703, 5701 and 5700 Edgedale Drive. Areas of severe erosion exists along the banks and is within 15 feet of the structures located on the properties of 5703 and 5700 Edgedale Drive. **Solution:** Stabilize the areas of erosion with traditional rock toe, sloping and re-vegetation of the stream bank.

Commission Comments:

- **Mr. Starr** asked if the gravel is used as a driveway because it appears the erosion is coming from the house side and less from eroding the streambank from velocity and flow. **Dale Hyatt** said they use the gravel as a cover where the grass does not grow and there's significant erosion coming from the stream.
- **Ms. Fleischmann** said if the gravel is not providing protection, how would you remedy the situation with the boulders/rocks. **Dale Hyatt** said we will review the final design to see how much space is available, and we only use the boulders when we absolutely have too. We prefer to put boulders to simulate the toe and slope the bank back and vegetate it if space allows it.
- **6319 Gainsborough Drive Bank Stabilization:** Significant erosion of Haresnipe Creek continues to encroach on the property of 6319 Gainsborough Drive. Erosion is now within 18 feet of the foundation of the home. **Solution:** This project will stabilize the areas of erosion along 6319 Gainsborough Drive with boulder toes and sloping and re-vegetation of the steam bank.

Commission Comments:

- **Mr. Starr** asked if there's been increased velocity from upstream or is it just bad placement of the driveway or home. **Dale Hyatt** said that it's not a great placement for the home and when you look on previous imaging there was some stabilization, but he doesn't believe there was a huge increase of flow throughout the years until the May storm which caused the significant loss of erosion.
- **Mr. Page** asked is there a re-vegetation plan. **Dale Hyatt** stated it will be determined based on the design where the reconstructed bank location is, and how much space we have between the driveway or home to replant. The other compounding issue is sewer line /sewer main and the desire not to have large trees planted in the easement.
- **Mr. Starr** commented that once again we are fixing an erosion problem caused by something that probably shouldn't been there in the first place, or it's just total lack of understanding that you cannot have mowed grass right to the edge of stream. **Mr. Senior** mentioned the buffer rules is saving us, and if it goes away we will need a back-up plan.
- **Ms. Fleischmann** asked is there an ordinance to prevent people from installing grass to the stream. **Blair Hinkle** said the Neuse buffer rules requires a 50 feet buffer between the top of the bank and maintained area, and mostly developers are aware but not the homeowners. He added that we are focusing in on the Public Education aspect. When we deliver services to the property owners, we need to take the opportunity to provide them with a packet of information that would basically be an owner's manual for the new infrastructure.
- **1115 Temple Street Drainage Improvements:** The existing 36-inch RCP driveway culvert at 1115 Temple Street is undersized and as a result overtops frequently during rain events preventing access to the residence. Additionally, continued overtopping has caused the downstream headwall to separate and is now in jeopardy of failing. **Solution:** Install a new dual 48-inch RCP driveway crossing with upstream and downstream headwalls.

Commission Comments:

- **Mr. Kane** asked why the project was re-scored. **Dale Hyatt** said if the situation changes and gets worse for any projects on the list, the property owner contacts staff, and we will go out and re-evaluate to see what's occurred. In this case the headwall failed.

- **6401 & 6313 Dresden Lane Drainage Improvements:** The existing 30-inch RCP that flows through the front yard of 6401 and the rear yard of 6313 Dresden Lane is undersized, resulting in crawlspace and garage flooding during heavy rainfall events. **Solution:** Alleviate the flooding during the design level storm by directing the majority of runoff into a new system in the right-of-way of Dresden Lane before discharging back into the system near Warwood Court.

Commission Comments:

- **Ms. Durso** asked if the RCP system would be effective if the road was ever widened. **Dale Hyatt** replied yes, and we will work with Transportation staff to see if there's future plans for widening.
- **Mr. Bostic** asked if the properties have been flooded before. **Dale Hyatt** said yes, and there are complaints dating back to 1997.
- **Mr. Kane** pointed to the map asking if staff is evaluating potential impacts to a certain area. **Dale Hyatt** replied, not at this point but there have been complaints further down on both sides and that's an area we are going to be looking at.
- **Mr. Starr** asked will control devices be put in where the new outfall comes in. **Dale Hyatt** said it will be part of the design.
- **Ms. Durso** commented with the amount of money being spent on this project, staff should really look at what will be going on downstream. **Dale Hyatt** agreed, and said probably addressing the whole area to see if it's adaptable for perhaps a larger long-term CIP project.

- **Drainage Assistance Project Costs**

<i>Estimated Project Costs</i>	
5703, 5701 & 5700 Edgedale Dr	\$160,000
6319 Gainsborough Dr	\$103,000
1115 Temple Street Drainag	\$97,000
6401 & 6313 Dresden Lane Drainage	\$282,000
Total Estimated Project Costs This Period	\$642,000
FY19 Budget	\$1,500,000
FY19 Remaining DA Funds	\$858,000

Motion:

Mr. Senior made a motion to approve all four projects, and **Mr. Carper** seconded. The motion was approved unanimously.

4. Annual Report Discussion

Blair Hinkle briefly went over the annual report presentation that included highlights on the five high level sections: Stormwater Infrastructure Projects, Drainage Assistance Program, Raleigh Rainwater Rewards, Stream Restoration & Water Quality, and the Program and Policy Updates. He informed the Commission they can review, make edits of the FY2018 Annual Report document and vote on it.

Commission Comments on Annual Report:

- **Mr. Senior** referenced (*Program & Policy Updates - Flood Hazard Mitigation Program*) section, indicating emphasis needs to be placed on the Water Quality benefit of that program. **Blair Hinkle** said he believes that the legislature clarified it a few years ago. **Ms. Durso** agreed with Mr. Senior and said it wouldn't hurt to add a sentence(s) in that section.
- **Mr. Senior** referenced (*Program & Policy Updates - Financial side*) section, stating expenses related to aging infrastructure for repair/replacement needs to be incorporated in the rate model. **Blair Hinkle** stated when the Asset Manager position was created in FY18 that part of the program is to determine what those future costs will be.
- **Ms. Durso** asked if staff consider the depreciation of infrastructure. **Blair Hinkle** answered that it's part of the Asset Management efforts and both the pragmatic effects of, if this pipe fails then what happens, but also the long term financial impact of the degrading infrastructure.

Blair Hinkle informed the Commission the action they will need to take is to recommend the annual report for presentation to the City Council, subject to the change on the Flood Hazard Mitigation section.

The Commission congratulated staff on the work they have performed in getting the number of projects done in a short span of time.

Motion:

Ms. Durso made a motion to approve the annual report and **Mr. Senior** seconded. The motion was passed unanimously.

5. Workplan Review Discussion

Blair Hinkle mentioned that what he wanted to get out of July's meeting was to make sure any future initiatives the Commission wanted to look at were covered in the workplan. He didn't see anything that was outside of the lines of what is already in the workplan, and if the Commission has any proposed changes or deletions he can incorporate those in the document.

Ms. Durso remarked the Commission developed a nice workplan that is not too specific nor too broad and most of what they want to do is covered in it.

Motion:

Mr. Senior made a motion to approve the workplan as presented, and both **Mr. Webb** and **Ms. Durso** seconded. The motion was passed unanimously.

6. Other Business

- **Blair Hinkle** informed the Commission this will be his last meeting and he feels good in leaving it under the leadership of Wayne Miles. He went on to say how he appreciated the Commission in providing him guidance and the knowledge they instilled in him over the past few years.
- **Ms. Durso** informed the Commission that she will not be able to attend September's meeting.

Adjournment: **Mr. Senior** made a motion to adjourn and **Mr. Bostic** seconded. The meeting adjourned at 4:06 pm.

Suzette Mitchell